

Application No. 09/610,630

2

IN THE CLAIMS

1 Claim 1 (currently amended): A method for use in a policy goal-based
2 management system employing service level goals for a computer network having one or
3 more network resources comprising the steps of:

4 enabling a system administrator to specify predefined service level goals for said
5 computer network;

6 specifying a prescribed quality of service goal for a prescribed client and
7 prescribed service;

8 executing policy goal-logic to automatically enforce said specified quality of
9 service goal, wherein said policy goal-logic is comprised in a general purpose computer
10 program;

11 ~~determining-monitoring~~ a delivered quality of service for said specified quality of
12 service goal being executed by said policy goal-logic, said ~~determining-monitoring~~ a
13 delivered quality of service including continuously monitoring states of said computer
14 network resources assigned to said prescribed client and said prescribed service;

15 determining if said delivered quality of service is different than said specified
16 quality of service goal; and

17 if so, said policy goal-logic executing prescribed actions regarding network
18 resources assigned to said client for said prescribed service, wherein said actions are
19 intended to adjust said delivered quality of service toward being equal to said specified
20 quality of service goal,

21 wherein said policy goal-action executes said prescribed without the system
22 administrator ~~does not have~~ having to specify said prescribed actions to said policy goal-
23 logic intended to enforce said specified quality of service goal.

Claims 2, 3 and 4 previously canceled.

1 Claim 5 (previously amended): The method as defined in claim 1 wherein said
2 step of determining if said delivered quality of service is different includes a step of
3 determining if said delivered quality of service exceeds said specified quality of service
4 goal and, if so, said step of executing includes steps of determining and executing a set of
5 actions to reduce said computer network resources assigned to said prescribed client and
6 said prescribed service of said specified quality of service goal.

Application No. 09/610,630

3

1 Claim 6 (original): The method as defined in claim 5 further including a step of
2 reporting to said system administrator said set of actions.

1 Claim 7 (original): The method as defined in claim 5 further including a step of
2 reporting to said system administrator results of executing said actions.

1 Claim 8 (currently amended): The method as defined in claim 1 wherein said step
2 of executing policy goal-logic to determine if said delivered quality of service is different
3 includes a step of determining if said delivered quality of service is worse than said
4 specified quality of service goal and, if so, said step of executing prescribed actions
5 includes steps of determining and executing a set of actions to increase network resources
6 assigned to said prescribed client and said prescribed service of said specified quality of
7 service goal.

1 Claim 9 (original): The method as defined in claim 8 further including a step of
2 reporting to said system administrator said set of actions.

1 Claim 10 (original): The method as defined in claim 9 further including a step of
2 reporting to said system administrator results of executing said actions.

1 Claim 11 (previously amended): The method as defined in claim 1 further
2 including the steps of storing said specified quality of service goals and determining
3 whether said stored quality of service goals should be updated.

1 Claim 12 (original): The method as defined in claim 11 further including a step of
2 updating said stored quality of service goals.

1 Claim 13 (original): The method as defined in claim 12 wherein each of said
2 quality of service goals is a service level quality of service goal.

1 Claim 14 (original): The method as defined in claim 13 wherein said step of
2 updating includes steps of adding a service level quality of service goal to said stored
3 quality of service goals, redefining a stored service level quality of service goal or
4 removing a stored service level quality of service goal.

1 Claim 15 (original): The method as defined in claim 1 further including steps of
2 monitoring a state of each network resource in a set of network resources and storing said
3 monitored states.

Application No. 09/610,630

4

1 Claim 16 (original): The method as defined in claim 15 further including a step of
2 updating said monitored state of each network resource in said set of said network
3 resources.

1 Claim 17 (original): The method as defined in claim 16 wherein said step of
2 updating includes steps of requesting an update of said state of each network resource in
3 said set of network resources, querying said state of each network resource in said set of
4 network resources and storing said updated state.

1 Claim 18 (currently amended): The method as defined in claim 15 wherein said
2 step of monitoring said state of each network resource further includes steps of receiving
3 a network event notification indicating a change in state of a network resource and
4 storing said indicated change of state of said network resource as an update of the state of
5 said network resource.

1 Claim 19 (currently amended): The method as defined in claim 1 further
2 comprising the steps of:

3 storing said set of service level quality of service goals;
4 storing said monitored states of a set of network resources;
5 wherein said step of specifying a prescribed quality of service goal includes
6 selecting said prescribed defined quality of service goal from said stored service level
7 quality of service goals for a prescribed client and prescribed service; and

8 wherein said step of ~~determining~~-monitoring a delivered quality of service
9 includes a step of using said stored monitored states to determine a delivered quality of
10 service for said specified quality of service goal.

1 Claim 20 (previously amended): The method as defined in claim 19 wherein said
2 step of determining if said delivered quality of service is different includes a step of
3 determining if said delivered quality of service exceeds said specified quality of service
4 goal and, if so, said step of executing includes steps of determining and executing a set of
5 actions to reduce network resources assigned to said prescribed client and said prescribed
6 service of said specified quality of service goal.

1 Claim 21 (original): The method as defined in claim 20 further including a step of
2 reporting to said system administrator said set of actions.

Application No. 09/610,630

5

1 Claim 22 (original): The method as defined in claim 21 further including a step of
2 reporting to said system administrator results of executing said actions.

1 Claim 23 (previously amended): The method as defined in claim 19 wherein said
2 step of determining if said delivered quality of service is different includes a step of
3 determining if said delivered quality of service is worse than said specified quality of
4 service goal and, if so, said step of executing includes steps of determining and executing
5 a set of actions to increase network resources assigned to said prescribed client and said
6 prescribed service of said specified quality of service goal.

1 Claim 24 (original): The method as defined in claim 23 further including a step of
2 reporting to said system administrator said set of actions.

1 Claim 25 (original): The method as defined in claim 24 further including a step of
2 reporting to said system administrator results of executing said actions.

1 Claim 26 (currently amended): Apparatus for use in a policy goal-based
2 management system including service level goals for a computer network having one or
3 more network resources comprising:

4 means for enabling a system administrator to specify predefined service level
5 goals for said computer network;

6 means for specifying a prescribed quality of service goal for a prescribed client
7 and prescribed service;

8 means for executing policy goal-logic to automatically enforce said specified
9 quality of service goal, wherein said policy goal-logic is comprised in a general purpose
10 computer program;

11 means for ~~determining~~ monitoring a delivered quality of service for said specified
12 quality of service goal being executed by said policy goal-logic, including means for
13 continuously monitoring states of said computer network resources assigned to said
14 prescribe client and said prescribed service;

15 means for determining if said delivered quality of service is different than said
16 specified quality of service goal; and

17 said means for executing said policy goal-logic; being responsive to said delivered
18 quality of service being different, for executing to cause said policy goal-logic to execute
19 prescribed actions regarding network resources assigned to said client for said prescribed

Application No. 09/610,630

6

20 service, wherein said actions are intended to adjust said delivered quality of service
21 toward being equal to said specified quality of service goal,

22 wherein said policy goal-action executes said prescribed actions without the
23 system administrator does not have having to specify said prescribed actions to said goal-
24 logic intended to enforce said specified quality of service goal.

Claims 27, 28 and 29 previously canceled.

1 Claim 30 (currently amended): The apparatus as defined in claim 26 wherein said
2 means for determining if said delivered quality of service is different includes means for
3 determining if said delivered quality of service exceeds said specified quality of service
4 goal and means for determining and executing a set of actions to reduce said computer
5 network resources assigned to said prescribed client and said prescribed service of said
6 ~~sepeified-specified~~ quality of service goal.

1 Claim 31 (previously amended): The apparatus as defined in claim 30 further
2 including means for reporting to said system administrator said set of actions.

1 Claim 32 (previously amended): The apparatus as defined in claim 30 further
2 including means for reporting to said system administrator results of executing said
3 actions.

1 Claim 33 (previously amended): The apparatus as defined in claim 26 wherein
2 said means for determining if said delivered quality of service is different includes means
3 for determining if said delivered quality of service is worse than said specified quality of
4 service goal and means for determining and executing a set of actions to increase said
5 computer network resources assigned to said client and said service of said specified
6 quality of service goal.

1 Claim 34 (previously amended): The apparatus as defined in claim 33 further
2 including means for reporting to said system administrator said set of actions.

1 Claim 35 (previously amended): The apparatus as defined in claim 33 further
2 including means for reporting to said system administrator results of executing said
3 actions.

1 Claim 36 (currently amended): The apparatus as defined in claim 26 further
2 comprising:

3 means for storing said set of service level quality of service goals;

Application No. 09/610,630

7

4 means for storing said monitored states of a set of said computer network
5 resources;

6 wherein said means for specifying a prescribed quality of service goal includes
7 means for specifying said prescribed defined quality of service goal from said stored
8 service level quality of service goals for a prescribed client and prescribed service; and

9 wherein said means for ~~determining~~monitoring a delivered quality of service
10 includes means for using said stored monitored states to determine a delivered quality of
11 service for said specified quality of service goal.

12 Claim 37 (previously amended): The apparatus as defined in claim 36 wherein
13 said means for determining if said delivered quality of service is different includes means
14 for determining if said delivered quality of service exceeds said specified quality of
15 service goal and means for determining and executing a set of actions to reduce network
16 resources assigned to said prescribed client and said prescribed service of said specified
17 quality of service goal.

1 Claim 38 (previously amended): The apparatus as defined in claim 37 further
2 including a means for reporting to said system administrator said set of actions.

1 Claim 39 (previously amended): The apparatus as defined in claim 37 further
2 including means for reporting to said system administrator results of executing said
3 actions.

1 Claim 40 (previously amended): The apparatus as defined in claim 36 wherein
2 said means for determining if said delivered quality of service is different includes means
3 for determining if said delivered quality of service is worse than said specified quality of
4 service goal and means for determining and executing a set of actions to increase network
5 resources assigned to said prescribed client and said prescribed service of said specified
6 quality of service goal.

1 Claim 41 (previously amended): The apparatus as defined in claim 40 further
2 including means for reporting to said system administrator said set of actions.

1 Claim 42 (previously amended): The apparatus as defined in claim 40 further
2 including means for reporting to said system administrator results of executing said
3 actions.